Amendments to the Claims

1.-15. (Canceled)

16. (currently amended) A method to initialize ~~an~~ one or more error ~~buffer in~~ buffers associated with an array of pixels for a monochrome digital image reproduction system, comprising:

generating a set of random seed values from a random number generator for initializing the error buffers and for use as initial error values when starting an error diffusion operation;

~~controlling the selection of~~ adjusting each of the random seed values from the random number generator such that the adjusted random seed values associated with the array of pixels are relatively large, likely to cause a dot to be printed ~~, producing a set of selected seed values~~ and increase the likelihood that dots will be printed sooner when a transition occurs between a zero image region and a nonzero image region; and

~~populating~~ initializing the error ~~buffer~~ buffers associated with the array of pixels with the set of ~~selected~~ adjusted random seed values prior to starting the error diffusion operation for reducing startup transients during the error diffusion operation.

17. (canceled)

18. (currently amended) A method to initialize error buffers in a color digital image reproduction system, comprising:

generating a first set of random seed values used as initial error values for starting an error diffusion process for a first color plane;

generating a second set of random seed values so as to negatively correlate the second set of seed values with the first set of random seed values for a second color plane;

generating a third set of random seed values for a third color plane;

adjusting each of the random sets of seed values for each of the first, second and third color planes such that all of the random seed values are relatively large to increase the likelihood that dots will be printed sooner when a transition occurs between a zero image region and a nonzero image region; and

populating ~~three~~ error buffers for each of the color planes with the random sets of seed values prior to starting the error diffusion process for reducing startup transients during the error diffusion operation.

19. (currently amended) The method of claim 18, generating at least one set of seed values ~~further comprising generating a set of seed values~~ from a first constant.

20. (currently amended) The method of claim 19~~, generating a second set of seed values further comprising~~ including generating a second set of seed values from a second constant and then altering the seed values to negatively correlate to the first set.

21. (currently amended) The method of claim 20 ~~, generating a third set of seed values further comprising~~ including generating a third set of seed values from a third constant different from the first and second constants.

22. (currently amended) The method of claim 18~~, generating a second set of seed values further comprising~~ including performing a negative correlation from the first set of seed values to form the second set of seed values.

23. (currently amended) The method of claim 22 ~~, performing a negative correlation further comprising~~ including multiplying the first set of seed values by a negative number to form the second set of seed values.

24. (currently amended) A method to initialize error buffers in a digital image reproduction system, comprising:

generating two ~~random~~ numbers from a random number generator;

~~applying a first function to~~ generating a first normally distributed variable from the two ~~random~~ numbers ~~to generate a first set of seed values~~;

generating a first set of seed values from the first normally distributed variable for use as initial error values for starting up an error diffusion process;

~~applying a second function that is 120 degrees out of phase~~ generating a second normally distributed variable from the ~~first function to the~~ two ~~random~~ numbers that is negatively correlated with the first normally distributed variable ~~to generate a second set of seed values~~;

generating a second set of seed values for using as initial error values for starting up the error diffusion process from the second normally distributed variable;

~~applying a third function that is 120 degrees out of phase~~ generating a third normally distributed variable from the ~~first and second functions to generate a third set of seed values~~ two numbers that is negatively correlated with the first normally distributed variable and the second normally distributed variable; ~~and~~

generating a third set of seed values for using as initial error values for starting up the error diffusion process from the third normally distributed variable; and

initializing the error buffers with the first, second, and third set of selected seed values prior to starting the error diffusion operation.

25. (New) The method according to claim 24 wherein the first normally distributed variable X_1 is generated according to the following:

$$X_1 = \sqrt{-2\ln R_1}\cos(2\pi R_2);$$

where the second normally distributed variable X_2 is generated according to

$$X_2 = \sqrt{-2\ln R_1}\cos(2\pi(R_2 - 1/3));$$

the third normally distributed variable X_3 is generated according to

$$X_3 = \sqrt{-2\ln R_1}\cos(2\pi(R_2 - 2/3)); \text{ and}$$

R_1 and R_2 are independent random numbers uniformly distributed on a unit interval.